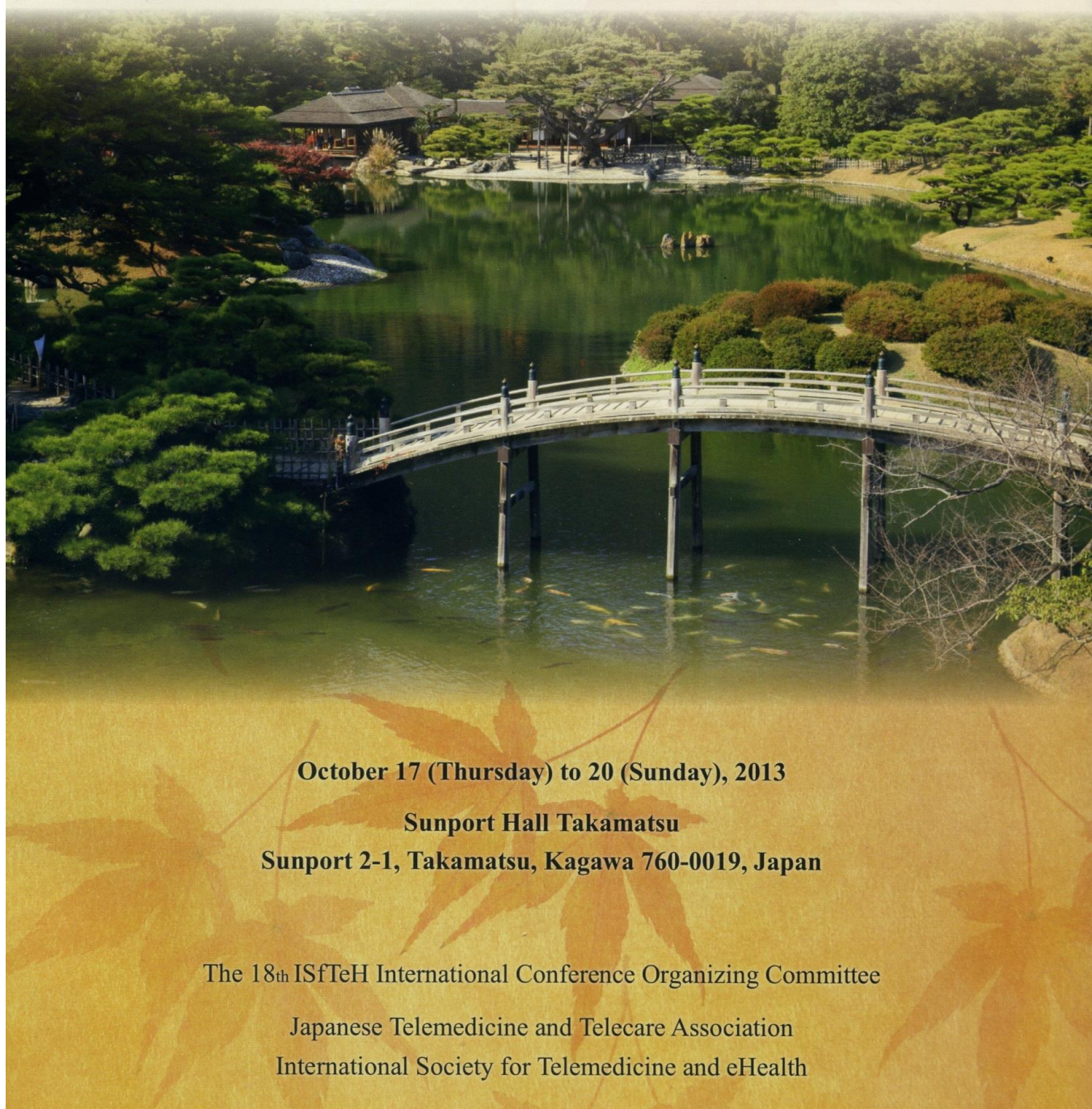




The 18th ISfTeH International Conference in Japan
The Construction of an International Collaboration with Telemedicine
Proceedings



October 17 (Thursday) to 20 (Sunday), 2013

Sunport Hall Takamatsu

Sunport 2-1, Takamatsu, Kagawa 760-0019, Japan

The 18th ISfTeH International Conference Organizing Committee

Japanese Telemedicine and Telecare Association

International Society for Telemedicine and eHealth

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JTTA/ ISfTeH Joint Keynote Lectures

October 18 Friday

Small Hall 1/ Sunport Hall Takamatsu 4F

9:30-10:00 **JKL-1** Joint Keynote Lecture 1

Chair Kazuhiro Hara President of JTTA Japan

“Telemedicine: Victories Won and Challenges Ahead”

Steven Normandin Vice President of ISfTeH, AMD Global Telemedicine USA

10:00-10:30 **JKL-2** Joint Keynote Lecture 2

Chair Frank Lievens Secretary of ISfTeH Belgium

“Network System of Electronic Patient Medical Record for Telemedicine and Telecare in Kagawa Prefecture and International Future Deployment”

Kazuhiro Hara President of JTTA Japan

11:00-11:30 **JKL-3** Joint Keynote Lecture 3

Chair Hideto Yokoi Kagawa University Hospital Japan

“Telemedicine and Regional Healthcare Information Networks in Japan”

Hiroshi Tanaka Tokyo Medical and Dental University Japan

11:30-12:00 **JKL-4** Joint Keynote Lecture 4

Chair Masaaki Tokuda Kagawa University Japan

“The Regional Medical Support by Telemedicine for Disaster- Stricken Areas by Tohoku Medical Megabank Organization (ToMMo)”

Hideyasu Kiyomoto Tohoku University Japan

12:00-12:30 **JKL-5** Joint Keynote Lecture 5

Chair Masatsugu Tsuji University of Hyogo Japan

“Collaborative Workflows: Empowering both Providers and Patients to Lower Costs and Improve Care Delivery Outcomes”

Mark Blatt Intel Corp. USA

International Keynote Lectures

October 19 Saturday

Room1: Kagawa International Conference Hall/ Symbol Tower 6F

9:00- 9:30 **IKL-1** International Keynote Lecture 1

Chair	Masayuki Honda	Nagasaki University Hospital	Japan
“Beyond Cutting Ribbons and Flowerily Inauguration”			
	Rifat Latifi	Arizona University	USA

9:30-10:00 **IKL-2** International Keynote Lecture 2

Chair	Ikuo Tofukuji	Takasaki University of Health and Welfare	Japan
“Why and How France Became a Telemedicine Country”			
	Andre Petitet	CATEL, Head of the International Commission	France

International Symposia

October 18 Friday

Room1: Kagawa International Conference Hall/ Symbol Tower 6F

17:00-18:30 **ISY- 111** International Symposium Quit Smoking

- | | | | |
|-------|--|---|-------------------|
| Chair | Kaoru Ashimine | Okinawa Prefectural Chubu Hospital | Japan |
| | Ikuo Tofukuji | Takasaki University of Health and Welfare | Japan |
| 1 | “Tobacco Quitline as Coordinating Mechanism for Promoting Smoking Cessation for 10 Million Smokers” | | |
| | Hiroyuki Noda | Ministry of Health, Labour and Welfare | Japan |
| 2 | “Evolving Quitline with e-health Technology : High Performance and Low Cost” | | |
| | Min Kyung Lim | National Cancer Center | Republic of Korea |
| 3 | “Smoking Cessation Activities in Thailand” | | |
| | Jintana Yunibhand | Thailand National Quitline | Thailand |
| 4 | “Kinen-marathon as Patients-to-patients Quitting Model in Japan” | | |
| | Yuko Takahashi | Nara Womens University | Japan |

Room2: Conference Room 54/ Sunport Hall Takamatsu 5F

13:30-15:00 **ISY- 121** International Symposium e-Health Economics

- | | | | |
|-------|---|---------------------------|-------|
| Chair | Masatsugu Tsuji | University of Hyogo | Japan |
| 1 | “Economic Evaluation of the “Long-term” and “Short-term” Effects of Telecare” | | |
| | Yuji Akematsu | Osaka University | Japan |
| 2 | “Introducing Multi-media Communication for Regional Medicine: Nagahama Telemedicine Project” | | |
| | Tomohiro Kuroda | Kyoto University Hospital | Japan |
| 3 | “Legal Interpretation of Face-to-Face Consultation via Communications Circuit” | | |
| | Isao Nakajima | Tokai University | Japan |
| 4 | “Issues of Telemedicine Reimbursement in Japan: Analysis from e-Health Economics” | | |
| | Masatsugu Tsuji | University of Hyogo | Japan |

October 19 Saturday

Room2: Conference Room 54/ Sunport Hall Takamatsu 5F

10:30-12:00 **ISY- 221** International Symposium Tele-homecare

- | | | | |
|-------|--|---|--------------|
| Chair | Koichi Sampei | India Welfare Village Society | Japan |
| 1 | “ICT-Based BP Measurement in Rural Clinics in India” | | |
| | Koichi Sampei | India Welfare Village Society | Japan |
| 2 | “ICT Utilization by Smart Phones and Cloud-based Services in Home Care Medicine in Japan” | | |
| | Junichiro Toya | Sakura-shinmachi Urban Clinic | Japan |
| 3 | “Moving e-Health to the ‘Home’ – Thinking it Through” | | |
| | Richard E. Scott | University of KwaZulu Natal | South Africa |
| 4 | “Telemedicine Landscape of India” | | |
| | Saroj Mishra | Sanjay Gandhi Post Graduate Institute of Medical Sciences | India |

Room3: BB Square/ e-Topia Kagawa 4F

10:30-12:00 **ISY- 231** International Symposium Telepathology

- | | | | |
|-------|--|---|-------------------|
| Chair | Taizo Shiraisihi | Mie University | Japan |
| | Mika Watanabe | Tohoku University | Japan |
| 1 | “Applications of Z-axis Video for Cytology (Zavic) to Various Cytology Practices” | | |
| | Katsushige Yamashiro | Hokkaido Cancer Center | Japan |
| 2 | “Clinical Guidelines for Telepathology Practices” | | |
| | Yasunari Tsuchihashi | Luis Pasteur Medical Research Center Kyoto | Japan |
| 3 | “Telepathology of Routine Pathology Slides Supports Rural Medical System” | | |
| | Ichiro Mori | Mita Hospital, International University of Health and Welfare | Japan |
| 4 | “Morphologic Diagnosis and International Collaboration in Telemedicine” | | |
| | Keizo Furuya | Ehime Prefectural Central Hospital | Japan |
| 5 | “Nation-wide Survey of Digital Pathology and Image Analysis in Korea” | | |
| | Kim Dae Cheol | Dong-A University College of Medicine | Republic of Korea |

Oral Presentations

October 18 Friday

Room1: Kagawa International Conference Hall/ Symbol Tower 6F

13:30 - 15:00 **IGS- 111 Fetal, Pregnant and Perinatal Telemedicine 1**

- | | | | |
|-------|---|--|-----------|
| Chair | Rintaro Mori | National Center for Child Health and Development | Japan |
| 1 | “Minimum Hardware Smart Simple and Wearable System for Patient Conducted Trans-network Remote Fetal Monitoring, Proposed Architecture with Evaluations of Subsystem and Component” | | |
| | Yasuhito Takeuchi | Akibagaoka Signaling Laboratory | Japan |
| 2 | “Remote Monitoring Program of High Risk Pregnant Women and Fetus in Mexico” | | |
| | José Carmelo Rangel Breña | Center for Engineering and Industrial Development | Mexico |
| 3 | “DigiMAPS : A Multimodal Communication System for Maternal Health Care in Indonesia” | | |
| | Hadi Hariyanto | TELKOM Indonesia | Indonesia |
| 4 | “Acceptance and User Experience of Online System for Mother and Children Health Record: A Preliminary Study” | | |
| | Andri Qiantori | PT. Telekomunikasi Indonesia | Indonesia |
| 5 | “Cluster Randomized Controlled Trial of Maternal and Child Health Handbook and Birth Cohort Study in Mongolia: Implication for New Technology” | | |
| | Rintaro Mori | National Center for Child Health and Development | Japan |
| 6 | “High Risk Pregnancy Management System in Beijing” | | |
| | Song Yu | Beijing Obstetrics and Gynecology Hospital, Capital Medical University | China |

15:30 - 17:00 **IGS- 112 Fetal, Pregnant and Perinatal Telemedicine 2**

- | | | | |
|-------|---|---|-------|
| Chair | Yasuhito Takeuchi | Akibagaoka Signaling Laboratory | Japan |
| 1 | “Remote Fetal-maternal Checkup on Cloud Computing Environment in South-western Hokkaido” | | |
| | Takahiko Shimmi | Sapporo Medical University | Japan |
| 2 | “The Efficacy of Mobile Cardiotocogram in Perinatal Care of Remote Islands in Japan” | | |
| | Kohei Odagiri | Naze Tokushukai Hospital | Japan |
| 3 | “Regional Collaboration in Our Perinatal Center Utilizing the Web-version Electronic Patients Records” | | |
| | Michiko Kido | Japanese Red Cross Medical Center | Japan |
| 4 | “ICT Utilization by Perinatal Medical Care in Iwate Prefecture” | | |
| | Tsuneo Yamada | Medical Information System Development Center | Japan |

- 5 **“Supporting Regionalised Perinatal Care by Telemedicine – Acute Care Consultation, Ward Rounds and Clinical Education Outreach”**
 Nigel R. Armfield The University of Queensland Australia
- 6 **“The Medical ICT Utilization for Perinatal Telemedicine in Remote Areas”**
 Yhuko Ogata Mitla Co. Japan

Room2: Conference Room 54/ Sunport Hall Takamatsu 5F

15:30-16:30 **IGS- 121** International Collaboration

- | | | | |
|-------|------------------|--------------------------------------|--------|
| Chair | Shuji Shimizu | Kyushu University | Japan |
| | Andrey I. Selkov | Russian Association for Telemedicine | Russia |
- 1 **“The Role of ISfTeH in The International Context of Telemedicine/eHealth”**
 Frank Lievens ISfTeH Swiss
 - 2 **“Role of the Technique of Business Planning of UNIDO – world Bank In Success of Telemedical Projects of the Russian Association for Telemedicine”**
 Andrey I. Selkov Russian Association for Telemedicine Russia
 - 3 **“Telemedicine Combined with Data Set of Medical Tourism Reduces Risk of Patients and Hospitals”**
 Min Hu Kyushu University Japan
 - 4 **“International Collaborations on Remote Medical Education in Asia and Beyond 10-Year Experience”**
 Shuji Shimizu Kyushu University Japan

16:30-17:00 **IGS- 122** Telemedicine and Society

- | | | | |
|-------|-----------------|---|--------|
| Chair | Tamara Eliseeva | Scientific Clinical Centre JSC “Russian Railways” | Russia |
|-------|-----------------|---|--------|
- 1 **“Telehealth Business Model Development in Indonesia”**
 Ediana Sutjiredjeki Politeknik Negeri Bandung Indonesia
 - 2 **“Social Significance of Telemedicine”**
 Tamara Eliseeva Scientific Clinical Centre JSC “Russian Railways” Russia

17:00-17:30 IGS- 123 E-prescription

- | | | | |
|-------|--|--|---------|
| Chair | Naomi Iihara | Tokushima Bunri University | Japan |
| 1 | “A Preliminary Survey of E-prescription Readiness in Nigeria” | | |
| | Emuoyibofarhe O. Justice | Ladoke Akintola University of Technology | Nigeria |
| 2 | “A Community Electronic Prescription System—The Expectation by Pharmacists” | | |
| | Naomi Iihara | Tokushima Bunri University | Japan |

17:30-18:30 IGS- 124 Mobile Telemedicine

- | | | | |
|-------|---|---|------------|
| Chair | Naoki Kodama | Takasaki University of Health and Welfare | Japan |
| | Cirano Iochpe | Universidade Federal do Rio Grande do Sul | Brazil |
| 1 | “A Context Aware Mobile Agent Middleware Framework for Remote Patient Monitoring” | | |
| | Akomolafe O. P | University of Ibadan | Nigeria |
| 2 | “Health Applications in Mobile Devices” | | |
| | Diego Alejandro Parra Álvarez | Nueva Granada Military University | Colombia |
| 3 | “Integrating mHealth Into a Chronic Disease Management Program for Elder Patients with Diabetes in Brazil” | | |
| | Cirano Iochpe | Universidade Federal do Rio Grande do Sul | Brazil |
| 4 | “Effectiveness of Preventive Healthcare through Telemedicine in Bangladesh” | | |
| | Partha Pratim Ghosh | Grameen Communications | Bangladesh |

October 19 Saturday

Room1: Kagawa International Conference Hall/ Symbol Tower 6F

10:30-11:15 IGS- 211 Tele-nursing

- | | | | |
|-------|--|--|-----------|
| Chair | Tomoko Kamei | St. Luke's College of Nursing | Japan |
| | Domantas Stundys | Vilnius University Hospital Santariškių Klinikos | Lithuania |
| 1 | “PrimCareIT – The Use of Teleconsultation and Telementoring Solutions for Counteracting Brain Drain and Professional Isolation of Health Professionals in Remote Primary Health Care” | | |
| | Domantas Stundys | Vilnius University Hospital Santariškių Klinikos | Lithuania |
| 2 | “Development and Implementation of Evidence-based Guidelines for Telenursing Practice for Patients with Chronic Obstructive Pulmonary Disease in a Japanese Setting” | | |
| | Tomoko Kamei | St. Luke's College of Nursing | Japan |
| 3 | “Study of Telenursing System that Promotes Self-care of Patient with Chronic Obstructive Pulmonary Disease” | | |
| | Yuko Yamamoto | St. Luke's College of Nursing | Japan |

11:15-12:00 IGS- 212 Tele-ophthalmology

- | | | | |
|-------|-------------------------|--|-----------|
| Chair | Reiko Kinouchi | Asahikawa Medical University | Japan |
| | Yogesana Kanagasasingam | School of Medicine, University of Notre Dame | Australia |
- 1 **“CREST: A Cost Effective e-Network for DR and Glaucoma Screening in Rural Guangdong, China”**
Tiantian Ye Zhongshan Ophthalmic Center, Sun Yat-sen University China
 - 2 **“Innovative, Low Cost Telemedicine Based Diabetic Retinopathy Screening Systems”**
Yogesana Kanagasasingam School of Medicine, University of Notre Dame Australia
 - 3 **“Educational Use and Cost of a Telemedicine Microsurgery Support System for Medical Students”**
Reiko Kinouchi Asahikawa Medical University Japan

13:00-14:15 IGS- 213 General/Policy

- | | | | |
|-------|-----------------|---|--------------|
| Chair | André PETITET | CATEL, Head of the International Commission | France |
| | Richard E Scott | University of KwaZulu Natal | South Africa |
- 1 **“Clinical Decision Support System – National Project of Lithuania – Designed for Telemedicine and other Purposes.”**
Lina Barzdaite Vilnius University Hospital Santariskiu klinikos Lithuania
 - 2 **“Managing Health Evacuations in a Globalized World”**
Luís Velez Lapão Universidade Nova de Lisboa Portugal
 - 3 **“Disaster e-Health’ – A Proposed Research Network”**
Richard Scott University of KwaZulu Natal South Africa
 - 4 **“Telemedicine Solutions for Members of the Nigerian Defence - The Nigerian Army”**
AJ Owosho Military Hospital Lagos Nigeria
 - 5 **“Use of Telemedicine Tools”**
André Petitdet CATEL, Head of the International Commission France

14:45-15:45 IGS- 214 New Technologies

- | | | | |
|-------|-----------------|------------------|-------|
| Chair | Tetsuo Sakamaki | Gunma University | Japan |
|-------|-----------------|------------------|-------|
- 1 **“Daily Assessment Tool of Disease Activity of Rheumatoid Arthritis by using a Smartphone Application: A Feasibility Study”**
Shu Nishiguchi Graduate School of Medicine, Kyoto University Japan
 - 2 **“Detection Effects by Thumbnail Image in a Medical Image Support System using Transmitting Delay Path of Satellite Communication”**
Takayuki Suga Shibaura Institute of Technology Japan
 - 3 **“Human Identification by Impulse Response Representation of ECG”**
Minkyu Kim Myongji University Republic of Korea
 - 4 **“Development of New Electrocardiogram Reconstruction Method Using State Space Model”**
Minkyu Kim Myongji University Republic of Korea

Room2: Conference Room 54/ Sunport Hall Takamatsu 5F

13:00 - 14:15 **IGS- 221** Tele-cardiology

- | | | | |
|-------|-------------------|--|--------|
| Chair | Junichi Ninomiya | Medical Division, Professional Doctors Net | Japan |
| | Adolfo Sparenberg | the Institute of Cardiology of Rio Grande do Sul | Brazil |
- 1

“A Simple Technique for Enhancing 12-Lead ECG Interoperability on the Application of Telemedicine”

Jui-chien Hsieh

Yuan Ze University

Taiwan
 - 2

“A New 12-lead ECG Mobile Learning Service in the Cloud for Medical Education”

Jui-chien Hsieh

Yuan Ze University

Taiwan
 - 3

“Atrial Fibrillation Detection through a Public Multipoint Telecardiology Platform in Southern Brazil”

Adolfo Sparenberg

the Institute of Cardiology of Rio Grande do Sul

Brazil
 - 4

“A Pilot Study for the Setup of Tele-CCU”

Ching-Ying Chiang

Chang Gung Memorial Hospital

Taiwan
 - 5

“Usefulness of Management of Cardiac Pacemaker Implanted Patients by a Portable Electrocardiogram Monitoring System”

Junichi Ninomiya

Medical Division, Professional Doctors Net

Japan

14:45 - 15:30 **IGS- 222** Education

- | | | | |
|-------|-----------------|---------------------------|-------|
| Chair | Nobuhiro Sakata | Dokkyo Medical University | Japan |
|-------|-----------------|---------------------------|-------|
- 1

“ISfTeH Students Working Group: Bringing eHealth Initiatives to the Future Professionals”

Adolfo Sparenberg

ISfTeH

Brazil
 - 2

“An International Telemedicine Curriculum?”

Maurice Mars

Dept of TeleHealth, University of KwaZulu-Natal

South Africa
 - 3

“Learning Opportunities of Telemedicine Literacy for Medical and Nursing Students”

Nobuhiro Sakata

Dokkyo Medical University

Japan

15:30 - 16:15 **IGS- 223** Electronic Health Record

- | | | | |
|-------|-----------------|-----------------------------|-------|
| Chair | Hiroshi Kondoh | Tottori University Hospital | Japan |
| | Frederick North | Mayo Clinic | USA |
- 1

“When Should You be Using the Patient Portal for Telemonitoring?”

Frederick North

Mayo Clinic

USA
 - 2

“EPR and PACS Sharing System Applying Cloud Technology and XDS/XDS-I”

Hiroshi Kondoh

Tottori University Hospital

Japan
 - 3

“Team Kagawa” Developed Newly Clinical Pathway for Diabetes Mellitus on Medical IT, K-MIX”

Koji Murao

Kagawa University

Japan

Room3: BB Square/ e-Topia Kagawa 4F

13:00 - 14:15 **IGS- 231** Remote-monitoring

- | | | | |
|-------|---|--|-------------------|
| Chair | Koichi Kurita | Kinki University | Japan |
| | Emuoyibofarhe O. Justice | Ladoke Akintola University of Technology | Nigeria |
| 1 | “Remote Monitoring of Patients Vital Signs” | | |
| | Emuoyibofarhe O. Justice | Ladoke Akintola University of Technology | Nigeria |
| 2 | “A Respiration Measurement System for Sleep Apnea Syndrome Monitoring using an Accelerometer” | | |
| | YounTae KIM | Myongji University | Republic of Korea |
| 3 | “Remote Monitoring Technique for Physical Activity Estimation by means of the Internet” | | |
| | Koichi Kurita | Kinki University | Japan |
| 4 | “InspectLife – Solution for Providing Telecare and Telehealth” | | |
| | Jiří Potůček | Charles University Prague | Czech Republic |
| 5 | “Patient Empowerment Using Telemonitoring and Self-monitoring in the Multilingual Patient Health Portal VIVAPORTE.U” | | |
| | Rolandas Bérontas | Vilnius University Hospital Santariskiu klinikos | Lithuania |

14:45 - 16:00 **IGS- 232** Evaluation

- | | | | |
|-------|--|-----------------------------------|-------|
| Chair | Takashi Hishitani | Saitama Children’s Medical Center | Japan |
| | Giichiro Ohno | Tokatsu Hospital | Japan |
| 1 | “Evidence for Person-centered Care in Telehealth Research” | | |
| | Claudia C. Bartz | International Council of Nursest | USA |
| 2 | “Remote Epilepsy Clinic Using a Video Conferencing System” | | |
| | Ayumi Narisawa | Kesennuma City Hospital | Japan |
| 3 | “What E-health Can Do and Cannot ? : Experimental Practice of e-health Supporting System Between Antarctic Station and Japan” | | |
| | Giichiro Ohno | Tokatsu Hospital | Japan |
| 4 | “Tele-consultation Service for Japanese Long-stayers in Chiang Mai, Thailand” | | |
| | Masaaki Tokuda | Kagawa University | Japan |
| 5 | “Accuracy of Telediagnosis of Fetal Heart Disease Using Ultrasound Image Transmission Via Internet” | | |
| | Takashi Hishitani | Saitama Children’s Medical Center | Japan |



JTA ISfTeH

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